

# Software Requirements Specification

for

## PDGo

Version 1.1 approved

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# Revision History

Name	Date	Reason For Changes	Version
Initial Revision	Dec 3, 2023	The initial draft of the documentation	1.0
Complete Submission	Dec 8, 2023	Complete all sections of the documentation	1.1

# 1. Introduction

The goal of the PDGo app is to offer a management solution designed to streamline operations within the Santa Barbara Public Defender's Office, catering to the organization's managerial needs. Users will be able to utilize the application for MCLE attendance, scheduling and managing time-off requests, submitting facility requests, and viewing and configuring employee profiles. This document will outline the necessary requirements and specifications involved to ensure the utilization of the PDGo app.

## 1.1 Purpose

The purpose of this Software Requirements Specification (SRS) document is to provide a detailed and comprehensive outline of the functional and non-functional requirements for the PDGo app. This document encompasses all aspects of the PDGo app, providing insights into the intended functionalities, system constraints, and performance expectations of the PDGo app. The foundational knowledge provided is key in understanding the specifications necessary for successful design, development, and implementation of the PDGo application.

## 1.2 Intended Audience and Reading Suggestions

The primary audience of this SRS document are the development team, project managers, system architects, stakeholders and other relevant parties responsible for the implementation and management of the PDGo App. Readers will be able to find sections detailing system interfaces, use cases, data models, and specifications throughout the document for their relevant purpose.

## 1.3 Product Scope

PDGo will be an administrative system to complement existing and new administrative systems from the Santa Barbara Public Defender's Office. PDGo will provide functionality and processes specific to the SBPD, it will not replace existing systems. Furthermore, PDGo will not directly integrate with existing systems. PDGo will provide Facilities Requests, Time Off Requests, an internal employee directory, and a training tracker for MCLE and other training and certifications.

## 1.4 Definitions, Acronyms, and Abbreviations

PDGo	The application being developed
SBPD	Santa Barbara Public Defender's Office
MCLE	Minimum Continuing Legal Education, a legally required amount of education for attorneys every year

TO	Time Off
PTO	Paid Time Off
SRS	Software Requirements Specification (this Document)
Section 508	A legal requirement to make applications accessible to people with impairments using technology
Microsoft Power Apps	A low-code environment to create apps for business applications
Microsoft Sharepoint Lists	A component of Microsoft Sharepoint

## 1.5 References

- G2A. Accessibility Requirements Tool (ART) Section 508. <https://www.section508.gov/>
- Reza Dorrani. PowerApps Tutorials [Video Playlist]. YouTube. <https://www.youtube.com/watch?v=pp6wBvy9Wgs&list=PLTyFh-qDKAiEIVlidnhELx5BusnzlDzkR>
- M365 Tech Help. PowerApps - Call custom APIs with custom connectors instantly [Video]. Youtube. <https://www.youtube.com/watch?v=F8oeZ0WHM5Q>
- Matthew Devaney. “Allow Multiple Power Apps Developers To Simultaneously Edit Canvas Apps”. 9 January 2022. <https://www.matthewdevaney.com/allow-multiple-power-apps-developers-to-simultaneously-edit-canvas-apps/>
- Kevin Stratvert. Power Automate Tutorial for Beginners [Video Playlist]. YouTube. [https://www.youtube.com/watch?v=dDO4Y4aDYXw&list=PLIKpQrBME6xKE\\_fxQ\\_YzHVV7HluHpifW9](https://www.youtube.com/watch?v=dDO4Y4aDYXw&list=PLIKpQrBME6xKE_fxQ_YzHVV7HluHpifW9)
- Nshan Kazaryan. Digitization and Modernization of PDHelpdesk Ticketing System. Ascent. <https://ascent.cysun.org/project/project/view/136>

## 2. Overall Description

### 2.1 System Analysis

PDGo will create an app to digitize and create digital workflows to allow simpler conformity to record keeping, and ensure more transparent administration of the SBPD staff. PDGo will not reimplement, nor directly interface with existing and new employee management systems, currently Workday. This poses challenges with data de-synchronization, which will be addressed via employee training. Another problem that arises from digitizing existing processes is employees not using the new system, which will be addressed via usability improvements, and employee training. Another technical hurdle will be access management, which can be addressed via strict per-row settings in the database. The final technical hurdle outlined is the upkeep of PDGo, which is addressed by using Power Apps, which is used for other apps already, and using the existing maintenance infrastructure.

### 2.2 Product Perspective

The PDGo App was created using Microsoft Power apps, along with Microsoft SharePoint and Microsoft Automate for the backend. This application is intended to work parallel with Santa Barbara County's Workday system. Up to our understanding, there aren't other apps that have all the components PDGO has. The PDGO app was created to give employees and supervisors a more convenient way to submit/approve time-off requests. As well as tracking their MCLE Training and submitting a facility request. All of those functionalities could be done within the app for the user's convenience.

### 2.3 Product Functions

**Note:** Depending on the role of the user, they may be able to perform more functionalities

#### 2.3.1 My Profile tab

- 2.3.1.1 Allow users to see and edit their profile

- 2.3.1.2 Allows users to see their team and supervisor profile

- 2.3.1.3 Allow users to see their calendar as well as their office location

- 2.3.1.3 Allow user to update their notification settings as well as log out of their account

#### 2.3.2 Time-Off Request

- 2.3.2.1 Allow users to create, edit, and delete multiple requests before submitting it

- 2.3.2.2 Allow users to select the dates and times of their requested time off

2.3.2.3 Allow users to select the reason code, as well as an option in case they need IT equipment during their time off

2.3.2.4 Allow users to write additional comments with their requests

2.3.2.5 Allow supervisors to see all the time-off requests that have been made

2.3.2.5 Allow supervisors to approve or denied their requests

### 2.3.3 MCLE Training

2.3.3.1 Allow users to see the available training for them to select

2.3.3.2 Allow users to see their scheduled trainings on their calendar

2.3.3.3 Allow users to check in by scanning the QR with their phones

### 2.3.4 Facility request

2.3.4.1 Allow users to submit a request, and label the level of importance

2.3.4.2 Allow users to write additional comments as well as see the status of their request

2.3.4.3 Allow supervisors to see the requests as well as closing the request

## 2.4 User Classes and Characteristics

### 2.4.1 Staff

Office staff will each have their own profiles within PDGo in order to be able to access its services. Staff will mainly use the application for requests related to their office. Staff members may mainly create time off requests, facility work requests, or request MCLE training that can be done from PDGo. All staff will not be expected to have a high level of technical expertise to use the application.

### 2.4.2 Supervisors

Supervisors will be able to use the same services from the app as the Staff. In addition to these services, supervisors will have access to features that allow them to manage the requests made by staff. A supervisor of a team of staff can manage requests made on the application. Management of requests includes approving and closing requests.



### **2.4.3 IT**

IT users of the application will have direct control of the data within the application. IT users will be managers of data flows within the application and will manage all user accounts. IT users will be expected to have sufficient knowledge of how to control the back-end workflow of PDGo.

## **2.5 Operating Environment**

The application will operate within the following environment: The application will be developed and deployed using PowerApps. The application will be usable through desktop and mobile devices. For managing data, it will currently use SharePoint to manage local data, report creation, and user management. Future states of this application will have the data linked using Azure AD in joint with other applications.

## **2.6 Design and Implementation Constraints**

PDGo will be created by an application creation environment called Microsoft Power-Apps, with the use of other various Microsoft products to integrate and expand the tools needed to bring the developers' vision of what PDGo is supposed to be. The development of PDGo in Microsoft PowerApps requires a holistic approach that considers regulatory policies, hardware capabilities, interface requirements, parallel operation, higher-order language choices, reliability and security aspects, and memory constraints. By addressing these factors comprehensively, developers can create a robust and effective application that aligns with organizational goals and user needs.

Regulatory policies play a pivotal role in the PDGo design policy. Compliance with specific rules and standards requires careful planning to meet compliance to protocols that can influence the software's features and functionalities such as data privacy, accessibility, and other industry standard regulation.

Hardware limitations will create constraints in the app's development, primarily keeping UI elements in the proper position and scaling based on the resolution of the device. Compatibility with various hardware configurations, specifically mobile devices, may shape the development process and influence design decisions. PDGo will store and access data that is held in Microsoft Sharepoint Lists as a database management system. However; Users will need to be referenced in a list, to access the base operation of PDGo to access the other lists for its functions. Functionality for the lists to be accessed is a priority to allow access to its functions for its users. If the lists aren't permitted to the user, PDGo's functions will not work properly for that set of users.

Interfaces with other applications are essential to consider, as PDGo will need to seamlessly integrate with existing software solutions Such as Microsoft Sharepoint and Power-Automate. Compatibility with other applications can enhance the overall user experience and streamline business processes. Sharepoint will be used to host, such as a database of users who request to take time off of work. PowerApps can connect to these applications through connections, these connections will allow the UI to communicate whether the action is to retrieve or store data. Power-Automate on the other hand, is a flow chart that creates custom actions or input in other Microsoft applications, that can allow special functions for PDGo to

achieve. These applications are streamlined to work together because they are all products under Microsoft itself.

Multiple users can access PDGo at once without any issues of use. This will ensure that the app does not disrupt critical operations and maintains efficiency during multiple access and simultaneous tasks executed. Developers need to consider how the app will function in tandem with existing workflows, therefore Microsoft's 365 services would be suited as a low-cost and effective service to create all functions and be a reliable experience.

Choosing the right technology stack is vital for efficiency, scalability, and long-term maintenance of the application. PDGo must use a specific environment that can communicate and transfer user input for the goal of creating a mobile app. PowerApps meets this quota for its cost-effectiveness and compatibility with Microsoft's 365 service for different applications for integration. Power apps will be the main application that holds both front and backend setup, the seamless integration with SharePoint can allow a database to be connected to store confidential data and present the information.

Compliance with Industry standards for data protection and security protocols must be a top priority. Using Microsoft's software guarantees the tools used by the developers will help meet these standards and address the reliability and security reliability of the development of the app.

Efficient memory management is crucial to prevent the app from crashing or having issues such as slowdowns, heavy datasets, and complex operations. The operations within PowerApps moderate memory management, which is a crucial function in PDGo's development.

## **2.7 User Documentation**

PDGo will be delivered with the following documentation:

- User training manuals, in either video or PDF format, depending on user feedback
- Administrative documentation, in text PDF format
- Comments inside the system where available
- Standard Software Requirements Specification in PDF format
- Software Design Documents in PDF format

## **2.8 Assumptions and Dependencies**

It is assumed that PDGo will function correctly when the database it uses is migrated from SharePoint to Azure AD.

Because the application is developed and deployed using PowerApps, users must have a mobile device or desktop device to use the application and its services.

## **2.9 Apportioning of Requirements**

### **2.9.1 Learning Management System**

PDGo would implement a management system that hosts learning assignments, and the documentation required for the success of assignments. The user will hold a record containing what training is completed, in progress, and not attempted. Trainings themselves, host a page that uses SharePoint connections, to pull video data, quiz questions, and excerpts. Sharepoint lists offer additional features on top of hosting data as a database, such as accessing Microsoft Stream features to upload, store, and play video files.

### 2.9.2 Chat Integration

PDGo can have the potential to implement a chat system that allows fellow users to communicate with each other within the application. Teams will be able to communicate with their peers individually or through a group messaging category that allows messages to be seen by various users who participate in the chat. Implementation would require external third-party software outside of the Microsoft 365 software line. While this may pose a challenge, luckily Microsoft offers other software companies integration tools that can act as connectors similar to other Microsoft apps for PowerApps to communicate based on the function. Twilio is a third-party connector that is under evaluation of consideration as it offers SMS that can be used for PDGo's development.

## 3. External Interface Requirements

This section of the document is for users who would like to use the PDGO software. This section will provide descriptions for users looking to interact with the software. There are 3 classifications of users; User, Supervisor, and Admin. Non-technical users should be directed to this section of the documentation. A dash will denote which user can see a particular page or element, blank would be all.

### 3.1 User Interfaces

3.1.1 The User interface will initialize when users navigate to the application, through the icon on a mobile device, URL to the application, or from PowerApps in the PDGO Organization.

3.1.2 The application will prompt the user to sign in if not already logged in.

3.1.3 The User Interface will display different dashboards depending on user type.

#### 3.1.4 User Dashboard

3.1.4.1 Users will see buttons and navbar links that they can only navigate to.

3.1.4.2 Users will see a request time off navbar link that redirects them to the time off request page.

3.1.4.3 Users will see an MCLE nav bar link that redirects them to the MCLE training page to check open courses, enroll, and sign in with a QR code.

3.1.4.4 Users will see a faq button and navbar link that will redirect them to the faq-user page.

3.1.4.5 Users will see a tutorials button and navbar link that will redirect them to the tutorials-user page.

3.1.4.6 Users will see an articles navbar link that will redirect them to the articles-user page.

3.1.4.7 Users will see the popular articles at the bottom of the page which when clicked on will redirect to that article's page.

3.1.4.8 Users will see the small user icon with a drop-down that will contain nav links to the profile page and alerts- user and technician page.

### 3.2 Hardware Interfaces

Our software does not contain any hardware interface requirements.

## **3.3 Software Interfaces**

### **3.3.1 iOS**

3.3.1.1 The Latest version of iOS is recommended to run Power Apps mobile. iOS 13 or later is the minimum required.

### **3.3.2 Android**

3.3.2.1 Latest version of Android is always the recommended version to run Power Apps mobile. Version 10 or later is the minimum required.

### **3.3.3 Windows**

3.3.3.1 Windows 10 version 17763.0 or later to run Power Apps for Windows

### **3.3.4 Browser**

3.3.4.1 Google Chrome, within the latest three major releases

3.3.4.2 Microsoft Edge, within the latest three major releases

3.3.4.3 Mozilla Firefox, within the latest three major releases

3.3.4.4 Apple Safari, with Version 13 and later

### **3.3.5 macOS**

3.3.5.1 Version 10.13 or later is required for browsers running Power Apps

## **3.4 Communications Interfaces**

PDGo shall interface with Outlook using the standard Microsoft connector to provide TLS security over HTTPS requests. PDGo shall use HTTPS for all internal and external communication whenever possible. TLS encryption will secure all communications to ensure that data privacy and integrity are preserved. As PowerPlatform provides all synchronization, this will not be specified. In the case that PDGo uses SMS messaging to notify users, notifications shall not include personally identifying information due to the lack of encryption and resulting privacy issues relating to SMS.

# **4. Requirements Specification**

## **4.1 Functional Requirements**

### **4.1.1 Home**

4.1.1.1 The system shall login and authenticate the user through Microsoft 365.

4.1.1.2 The system shall validate the user exists in the SharePoint lists.

4.1.1.3 The system shall recognize user roles (Administrator, General User) and display corresponding accessible data to the user.

4.1.1.4 The system should contain buttons to navigate to Profile, Time Off Requests, MCLE Trainings, and Facility Requests.

### **4.1.2 Profile**

4.1.2.1 The system should display the logged-in user's Name, Phone Number, Profile Picture, and About Me description.

4.1.2.2 The system shall provide forms in which a user can edit their Phone Number, Profile Picture, and/or About Me description, submit their edits, and immediately view their changes on their Profile page. In the event of errors, they will be displayed next to their submission fields.

4.1.2.2.1 The form shall send a POST request to update the database with the inputted data.

4.1.2.3 The system should verify the validity of the new Phone Number, Profile Picture, and/or About Me description.

4.1.2.3.1 The system should ensure that 10 digits are provided for a valid US telephone number. Only numbers are valid inputs. The Phone Number input field will not allow any other character to be inputted.

4.1.2.3.2 The system shall ensure a valid file extension of .png, .jpg, .jpeg, or .gif. Non-image files will not be acceptable as input.

4.1.2.3.3 The system shall ensure that no HTML injection attacks can be inputted into the field. In addition, it will also ensure the number of total characters does not exceed the limit on the database About Me column.

### **4.1.3 Time Off Request**

4.1.3.1 The system shall provide a form in which a user can select multiple dates/timelines, input optional Additional Comments for each request, and submit all requests.

- 4.1.3.2 The system should send a POST request to update the database with the inputted data.
- 4.1.3.3 The system should verify a Time Off Request submission with valid day selections past two weeks of the current date and no HTML injections in the Additional Comments text submission.
- 4.1.3.4 The system shall ensure that all Time Off Request submissions include, at minimum, a Start Date, End Date, and Reason Code. In the event any of the following is not provided, an error will be displayed that the user must provide the respective data.
- 4.1.3.5 The system should include an Add To Request button that appends the time selected to the Requests list and displays all currently appended requests.
- 4.1.3.6 The system should notify the administration of the newly submitted request and email the user a receipt of their submission.
- 4.1.3.7 The system shall allow users to view their status on forms and whether they have been approved or denied by their administrators.
- 4.1.3.8 The system shall update the number of days available for Paid Time Off for each user and notify users when they have run out of paid time off.
- 4.1.3.9 The system shall provide an option for a general user to view past Time Off Requests they have submitted.

#### **4.1.4 MCLE Training**

- 4.1.4.1 The system shall verify an MCLE Training registration is currently not registered by the signed-in user.
- 4.1.4.1.1 In the event the selected MCLE Training is already registered by the signed-in user, the system shall prevent the user from registering again for the MCLE Training.
  - 4.1.4.1.2 In the event of registering for an MCLE Training, the system shall notify the administration of the registration and email a receipt of the registration to the signed-in user.
- 4.1.4.2 The system should provide a form in which a user can sign up for an event and receive all information about the event (i.e. Date/Time of event, Location, Number of attendees, etc.).
- 4.1.4.3 The system should provide the host of an event to publish a QR code for users to scan with the app to verify their attendance.
- 4.1.4.4 The system may provide options for the host to obtain a QR code connected to the event's ID and enable users to scan and mark their attendance.

## 4.1.5 Facility Request

4.1.5.1 The system shall provide a form that a user can fill out, submit, and view Facility Request forms for facilities in need of maintenance or attention by the administration.

4.1.5.2 The system shall provide a form in which a user can input a Title, Description, and Priority field input.

4.1.5.3 The system shall verify User Facility Request forms contain at minimum a valid Title, Description, and Priority.

4.1.5.3.1 The system should ensure the text submission includes only alphabetical and numerical characters and a limit of 20 characters. In the event the maximum is reached, the text field will not enable any more text inputted into the field. The field will not allow any other special characters to be inputted into the field.

4.1.5.3.2 The system shall ensure no HTML injections and a limit of 200 characters can be inputted into the Description field. In the event the maximum is reached, the text field will not enable any more text inputted into the field.

4.1.5.3.3 The system should ensure a selection of either Normal, Urgent, or Immediate.

4.1.5.3.3.1 In the event of a Normal priority, notifications will be sent out to related administration on a bi-weekly basis from the submission date.

4.1.5.3.3.2 In the event of an Urgent priority, notifications will be sent out to available administration on a 2-day basis from the submission date.

4.1.5.3.3.3 In the event of an Immediate priority, notifications will be sent out to all administrations on an hourly basis from the submission date.

4.1.5.4 The system should send a receipt and notification to the logged-in user and relevant administration upon Facility Request submission..

4.1.5.5 The system shall provide administrators with Categories to organize similar user requests under one Category to then perform one action (Approve, Deny, Cancel) which then cascades onto all requests under the same Category.

4.1.5.6 The system should verify Admin Facility Requests' Categories with a valid Title.

4.1.5.6.1 The system shall ensure the text submission includes only alphabetical and numerical characters and a limit of 20 characters.

4.1.5.6.2 The system shall ensure there are no duplicate Title entries. On Title submission, it will display an error if there exists a Category Title with the same name already in the database.

4.1.5.7 The system should only display available Categories to the logged-in user.



4.1.5.8 The system should allow requests to be available on the system to be viewed, edited, and canceled by the Administration and the associated Users.

4.1.5.9 The system shall allow an administrator to perform all the functions a general user can, and in addition, view and manage all user requests.

## **4.2 External Interface Requirements**

### **4.2.1 Notification System**

4.2.1.1 The system shall trigger notifications of the data periodically every seven days.

4.2.1.2 The input for the notification system is the records that users should be notified of either changing or growing stale.

### **4.2.2 User Interface**

4.2.2.1 The user interface shall use the appropriate input control to limit inputs into the correct format. For example, a calendar shall be used to input dates, this provides both an easier user experience but also makes dates unambiguous.

4.2.2.3 PDGo shall use standard localization practices to ensure that information such as dates and times are formatted properly for the users' locale.

4.2.2.4 PDGo shall sanitize all inputs to ensure that no HTML injection is possible, as well as sanitize all outputs similarly.

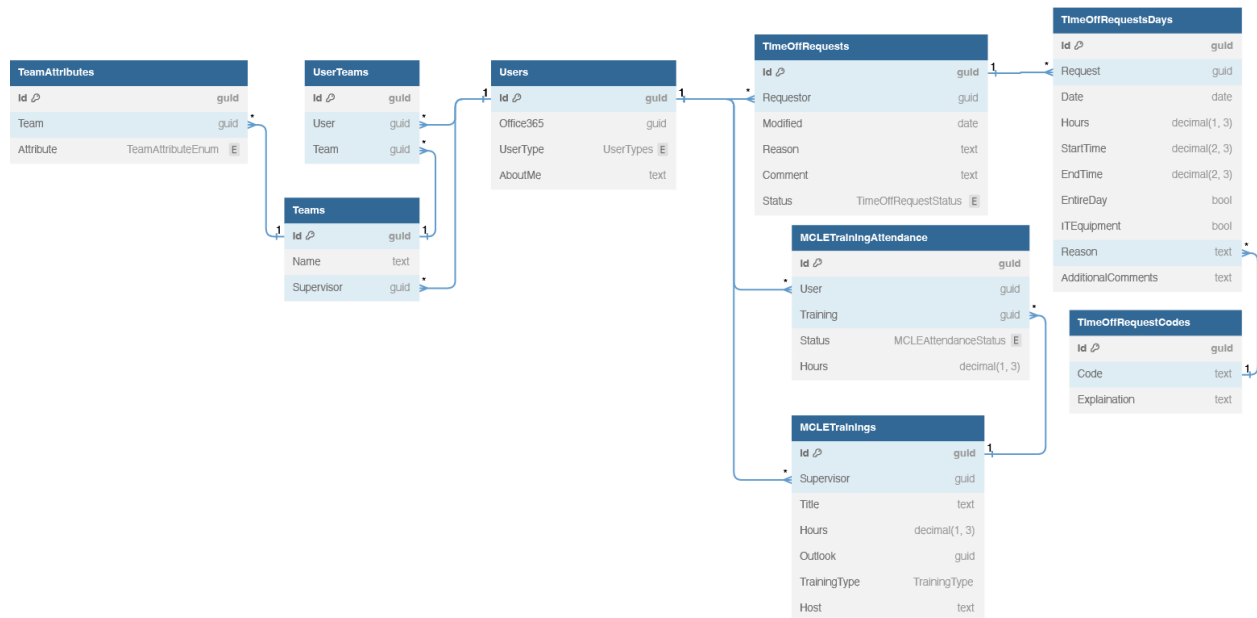
4.2.2.5 PDGo shall properly scale to all common screen sizes. PDGo shall be usable on a screen of an iPhone 14 or later.

### **4.2.3 Landing Page**

4.2.3.1 PDGo shall have a parameter to allow deep linking into any accessible part of the app.

4.2.3.1.1 If the parameter is not present or invalid, the home page shall be opened.

## 4.3 Logical Database Requirements



4.3.1 PDGo shall provide no direct redundancy or data protection.

4.3.1.1 Data shall be protected via the utilization of Microsoft Sharepoint.

4.3.2 Users and teams shall be accessible to anyone at SBPD.

4.3.3 Time off requests and MCLE training shall only be accessible to the requesting user and their manager(s).

4.3.4 Facilities requests shall be accessible to the proper administrator, as well as the requesting user.

4.3.5 Root accounts shall have access to all data in the system.

## 4.4 Design Constraints

Due to the low-code nature of PowerPlatform, many direct accesses to hardware or networking protocols are not available. Furthermore, due to SBPD being a government entity, many premium connectors are also unavailable, or require tedious approval processes to use, and shall thus be avoided during this project. Furthermore, due to using PowerApps, the user interface customization and input types are limited to the default to avoid additional upkeep.

## **5. Other Nonfunctional Requirements**

### **5.1 Performance Requirements**

5.1.1 PDGo is designed to deliver a seamless user experience, with an expectation for the application to load its core features within a maximum time frame of 3 seconds.

5.1.2 The application will be capable of supporting simultaneous use by 80% of the Public Defender's (PD) staff, ensuring consistent accessibility during peak operational hours.

5.1.3 Upon data entry and submission, PDGo will process requests and updates within less than 5 seconds, facilitating prompt task execution and record-keeping.

5.1.4 The app aims for a high level of transactional integrity, with a target of successfully processing 90% of transactions without system errors to minimize disruptions to workflow.

### **5.2 Safety Requirements**

5.2.1 While interacting with the application, users must remain cognizant of their physical environment to ensure their safety and the safety of those around them.

5.2.2 Users shall utilize only their authenticated accounts for application access unless given explicit authorization to operate on behalf of another user.

5.2.3 It is expected that users adhere to any instructional prompts or warnings displayed by the application to prevent misuse and maintain operational protocol.

### **5.3 Security Requirements**

#### **5.3.1 User Identity Authentication**

No additional User Identity Authentication shall be required by the system. The users will be assumed to pass through another layer of authentication outside the range of the system through privately accessible mobile devices with unique access to the app through their company-issued Microsoft 365 accounts.

#### **5.3.2 HTML Injection**

All form submissions in the system shall be protected against HTML injection attacks to prevent malicious software from potentially entering the database.

### **5.3.3 Private User Data**

All sensitive user data (i.e. SSN, Home Address, Bank information, etc.) shall be kept hidden and non-accessible to all users and administration. The system shall not grant access to sensitive data to any user or administrative account.

## **5.4 Software Quality Attributes**

5.4.1 Product should be easy to learn and use for beginner and experienced users and administrators.

5.4.1.1 All users should spend no longer than five minutes on a single page in the application.

5.4.1.2 Administrators should spend no longer than ten minutes organizing requests.

5.4.1.3 Administrators should spend no longer than five minutes to search requests.

5.4.1.4 All users should spend no longer than 20 minutes creating a new Time Off Request.

5.4.1.5 All users should spend no longer than five minutes to view and join an MCLE Training.

5.4.1.6 All users should spend no longer than ten minutes to create a new Facility Request.

5.4.2 Product should seamlessly transition between Portrait and Landscape mobile screens.

5.4.3 Product should adapt the user interface based on the screen resolutions for Mobile, Tablet, and Desktop.

5.4.4 All images should contain descriptive alternative text fields.

5.4.5 Product should follow all WCAG 2.0 Web Accessibility Standards.

5.4.6 Product should be available 95% of the time at minimum for users to access, download, and update.

5.4.7 Product should display errors when incorrect required field entries are invalidated.

5.4.8 Product shall be stress-tested with more than 200% of the anticipated peak load to ensure application scalability before deployment.

## **5.5 Business Rules**

5.5.1 Administrative and Supervisory roles within PDGo are granted full operational capabilities, subject to the scope of their authorization, to support management and oversight functions.

5.5.2 Staff users are permitted to interact with their submissions, including time off requests, MCLE training applications, and facility requests, and may view their personal activity logs, and notifications, and access a shared knowledge repository.

5.5.2.1 Staff interactions with the application will be confined to their submissions, ensuring data privacy and user-specific task management.

## **6. Legal and Ethical Considerations**

### **6.1 Privacy and Security**

#### **6.1.1 Transparency through Privacy Policy**

A comprehensive, understandable, and accessible privacy policy is essential. This policy should inform users about data collection, processing, and storage methods. This policy shall be designed to be included with employee onboarding.

#### **6.1.2 Accurate Management of Personal Information**

The privacy policy must provide an accurate description of personally identifying information handling, use, disclosure, and storage.

#### **6.1.3 Multi-Factor Authentication (MFA)**

To ensure that private information remains secure, the use of Multi-Factor Authentication (MFA) is mandatory. This extra layer of security guarantees that only authenticated users can access sensitive data, adding a critical safeguard against unauthorized access.

#### **6.1.4 User Data Control and Rights**

The privacy policy shall detail how users can manage their data and exercise rights regarding data privacy, emphasizing user empowerment in information management.

### **6.2 End-User License Agreement (EULA)**

The End-User License Agreement (EULA) serves as the legal framework governing the use of the application.

#### **6.2.1 Agreement Details**

The EULA shall be a legally binding agreement between SBPD and the users of PDGo. It shall specify the terms and conditions under which PDGo can be used by the end user, while also listing all permitted and prohibited uses.

#### **6.2.2 Prevention of Misuse**

Acceptance of the EULA shall be mandatory for users, ensuring their compliance with its terms. The EULA's terms shall be designed to prevent users from exploiting PDGo.

### **6.2.3 Usage Guidelines**

The EULA should clearly outline what actions the client is permitted to take with the software and what actions are prohibited, thus providing a comprehensive guide to responsible usage.

### **6.2.4 Terms and Liabilities**

The EULA shall explain the terms of the agreement, outline liability, provide details about violations, and clearly articulate the consequences of any breaches of the agreement, including but not limited to disciplinary action or firing of employees who violate the EULA.

### **6.2.5 Disclaimers and Termination**

The EULA shall include relevant disclaimers to manage expectations and also outline the circumstances under which the user's right to use the application may be terminated.

# Appendix A: Glossary

<b>PDGo</b>	The application being developed
<b>SBPD</b>	Santa Barbara Public Defender's Office
<b>MCLE</b>	Minimum Continuing Legal Education
<b>TO</b>	Time Off
<b>PTO</b>	Paid Time Off
<b>SRS</b>	Software Requirements Specification (this Document)
<b>Section 508</b>	A legal requirement to make applications accessible to people with impairments using technology
<b>Microsoft Power Apps</b>	A low-code environment to create apps for business applications
<b>Microsoft Sharepoint Lists</b>	A component of Microsoft Sharepoint



# **Appendix B: To Be Determined List**

- MCLE Training Requirements